APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,055	12/06/2001	Ellis T. Fisher	010387	9043

			EXAMINER
23696	7590	02/24/2005	D AGOSTA, STEPHEN M

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Patents Department
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ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/006,055	FISHER, ELLIS T.
	Examiner	Art Unit
	Stephen M. D'Agosta	2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *21 December 2004*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-32* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *14,18,22-25,28 and 29* is/are allowed.

6) ☒ Claim(s) *1-13, 15-17, 26-27, 30-32* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 12-21-04 have been fully considered but they are not persuasive.

1. The applicant argues the prior art does not teach detecting a high-rate data service. The examiner disagrees since the office action points to several places where this is taught (see pages 6-7 where the example discloses the high-rate data system being selected). Magnusson also teaches using several other parameters to select a system, such as loading).

2. The applicant argues that the prior art does not teaches a "data burst optimizer". The examiner disagrees since Magnusson (page 7, L15-21) teaches an example whereby the processor/DBO selects optimal means for exchanging data based on the user's selected application, which reads on the claim and is broadly interpreted.

3. The applicant argues the prior art does not teach determining a need for exchanging data. The examiner disagrees since Magnusson teaches an exchange of data between said mobile and a BTS (example disclosed on page 6, L30 to page 7, L21) which outlines an e-mail system that will synchronize itself based on a need to transfer data that is sitting in an inbox/outbox.

4. The applicant argues that the rejection for claims 4, 10, 13, 15, 17, 19 and 27 is not proper and based on impermissible hindsight. The examiner disagrees and provided well-known industry examples to support his rejection. For example, claims 4, 10, 13 17 and 27 disclosed use of a logon/password to authenticate the user. The examiner cited well-known industry software, eg. Microsoft, which uses logon/password protection (which would be used by one skilled in the art). Regarding claims 15 and 19, the examiner provided the well-known industry PING command as a means one skilled would use to "test" the network connection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

<u>Claims 1-3, 5-9, 11-12, 16, 20-21 and 26</u> rejected under 35 U.S.C. 102(b) as

being anticipated by Magnusson et al. WO99-49690 (hereafter Magnusson).

As per **claim 1**, Magnusson teaches a system comprising:

A processor configured to detect when a wireless mobile unit is in an high data rate (HDR) area (page 5, L16 to page 6, L12 teaches SIM Card processor receiving/storing data from cell broadcast to include information about an HDR area), said processor being configured to determine a need for exchanging data between said wireless mobile unit and a base station (BTS) [page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21]; and

A data burst optimizer (DBO) configured to exchange said data between said wireless mobile unit and said BTS <u>when the processor detects said wireless mobile unit is in</u> said HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means for exchanging data based on the user's selected application). <u>and the processor determines a need for exchanging data between the wireless mobile unit and the base station (Magnusson teaches an example whereby the user logs on to the network to use an email application, eg. Microsoft Outlook, which can sense if data is to be exchanged, page 6 to page 7).</u>

As per **claim 2**, Magnusson teaches claim 1 wherein said processor invokes said DBO to exchange said data between said wireless mobile unit and said BTS when said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting the optimal carrier service, eg. HDR, based on the application chosen).

As per **claim 3**, Magnusson teaches claim 2 wherein said DBO is configured to continuously detect when said wireless mobile unit is in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 5**, Magnusson teaches claim 3 wherein said DBO is configured to stop exchanging said data between said mobile unit and said BTS when said mobile is not in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 6**, Magnusson teaches a wireless system comprising:
Means for detecting when a mobile is in an HDR area (page 5, L16 to page 6, L12 teaches SIM Card processor receiving/storing data from cell broadcast to include information about an HDR area);
Means for determining a need to exchange data between said mobile and a BTS [page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21]; and
Means for exchanging said data between said mobile unit and said BTS (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means for exchanging data based on the user's selected application) <u>when mobile is in a HDR area and the processor determines a need for exchanging data between the wireless mobile unit and the base station (Magnusson teaches an example whereby the user logs on to the network to use an email application, eg. Microsoft Outlook, which can sense if data is to be exchanged, page 6 to page 7).</u>

As per **claim 7**, Magnusson teaches claim 6 wherein said detecting means invokes said exchanging means to exchange said data between when said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting the optimal carrier service, eg. HDR, based on the application chosen).

As per **claim 8**, Magnusson teaches claim 6 wherein said detecting means invokes said exchanging means to exchange said data between when said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting the optimal carrier service, eg. HDR, based on the application chosen) and said determining means determines said need to exchange said data between said wireless mobile unit and BTS (page 6, L30 to page 7, L20 teaches an example whereby the user operates a computer and the system determines which carrier service to use for transmitting/exchanging data.

As per **claim 9**, Magnusson teaches claim 7 wherein said exchanging means continuously detects when said wireless mobile unit is in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 11**, Magnusson teaches claim 9 wherein said exchanging means stops an exchange of said data between said mobile unit and said BTS when said mobile is not in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 12**, Magnusson teaches a method for exchanging data between a wireless mobile unit and a BTS comprising:
Detecting when said wireless mobile is in a HDR area (page 5, L8-35 teaches system selecting the optimal carrier service, eg. HDR, based on an SMS cell broadcast message);
Determining a need for exchanging said data between said mobile and BTS (user operates computer application to transmit/receive data via mobile/SIM, page 5, L30-35);
Invoking a data burst optimizer to synchronize an exchange of said data between said mobile and said BTS (page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21)
Exchanging said data between said wireless mobile unit and said BTS when said mobile is in said HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application) and there is a need for exchanging data between the wireless mobile unit and the base station (Magnusson teaches an example whereby the user logs on to the network to use an email application, eg. Microsoft Outlook, which can sense if data is to be exchanged, page 6 to page 7).

As per **claim 16**, Magnusson teaches claim 15 wherein said pinging step is performed by said data burst optimizer (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application and hence one skilled would expect said processory/DBO to perform pinging step as well).

As per **claim 20-21**, Magnusson teaches claim 19/17 wherein said pinging step is performed by said data burst optimizer (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application and hence one skilled would expect said processory/DBO to perform pinging step as well).

As per **claim 26**, Magnusson teaches a computer readable medium including computer program, said program implementing a method for exchanging data between mobile and BTS (figure 1 shows laptop connected to mobile/SIM which inherently use computer/instructions to provide communications) comprising:

A first code segment for detecting when said wireless mobile is in a HDR area (page 5, L8-35 teaches system selecting the optimal carrier service, eg. HDR, based on an SMS cell broadcast message);

A second code segment for determining a need to exchange data between said mobile and said BTS (user operates computer application to transmit/receive data via mobile/SIM, page 5, L30-35);

A third code segment for invoking a DBO to synchronize an exchange of said data between said mobile and said BTS (page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21);

A fourth code segment for exchanging said data between said mobile and said BTS when said mobile is in said HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application).

As per **claim 32,** Magnusson teaches claim 12 and wherein exchanging data occurs at a speed of 2.4Mbps (Magnusson teaches a "low" rate data area and a "high(er)" data rate area, whereby said high data rate can be virtually any data rate and reads on 2.4Mbps).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 10, 13, 15, 17, 19 and 27 rejected under 35 U.S.C. 103(a) as being

unpatentable over Magnusson.

As per **claim 4,** Magnusson teaches claim 2 **but is silent on** wherein said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security

purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 10**, Magnusson teaches claim 7 **but is silent on** wherein said exchanging means transmits a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 13**, Magnusson teaches claim 12 **but is silent on** wherein said exchanging means transmits a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 15**, Magnusson teaches claim 12 **but is silent on** comprising:

Pinging said BTS to detect when said wireless mobile unit is in said HDR area after said invoking step and prior to exchanging step.

Magnusson teaches the BTS sending an SMS cell broadcast message which the mobile will receive to determine available carrier services (page 5, L16-35) – once received, the mobile would then exchange data via an optimal service. The "PING" command is a well known industry standard supported by TCP/IP and one skilled would use to determine availability of BTS services if/when a SMS cell broadcast message is not received.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it pings said BTS to detect when

said wireless mobile unit is in said HDR area after said invoking step and prior to exchanging step, to provide means for detecting if the mobile can use HDR services for data transmission.

As per **claim 17**, Magnusson teaches a method for exchanging data between a wireless mobile unit and a BTS, said method comprising:
Detecting when said wireless mobile is in a HDR area (page 5, L8-35 teaches system selecting the optimal carrier service, eg. HDR, based on an SMS cell broadcast message);
Determining a need to exchange data between said mobile and said BTS (user operates computer application to transmit/receive data via mobile/SIM, page 5, L30-35);
Invoking a DBO to synchronize an exchange of said data between said mobile and said BTS (page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21);
Exchanging said data between said mobile and said BTS when said mobile is in said HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application);
But is silent on Transmitting a logon name and password from said mobile to said BTS to authenticate said mobile unit.
Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.
It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 19**, Magnusson teaches claim 17 **but is silent on** comprising:
Pinging said BTS to detect when said wireless mobile unit is in said HDR area after said invoking step and prior to exchanging step.
Magnusson teaches the BTS sending an SMS cell broadcast message which the mobile will receive to determine available carrier services (page 5, L16-35) – once received, the mobile would then exchange data via an optimal service. The "PING" command is a well known industry standard supported by TCP/IP and one skilled would use to determine availability of BTS services if/when a SMS cell broadcast message is not received.
It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it pings said BTS to detect when said wireless mobile unit is in said HDR area after said invoking step and prior to

exchanging step, to provide means for detecting if the mobile can use HDR services for data transmission.

As per **claim 27**, Magnusson teaches claim 26 **but is silent on** wherein a fifth code segment for transmitting a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claims 30-31,** Magnusson teaches claims 1/12 **but is silent on** comprising a signal strength indicator operable to indicate whether a carrier signal from the BTS is above a predetermined level.

The examiner takes Official Notice that it is well known in the art of cellular systems to use signal strength indicators to determine if/when a mobile has roamed into an area served by another BTs (eg. would be included in a neighbor list for potential future handoff). Hence Magnusson must determine if/when he is in the area of a BTS that can support high data rate communications.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it uses a signal strength indicator operable to indicate whether a carrier signal from the BTS is above a predetermined level, to provide means for detecting if/when the user has roamed into a HDR area.

Allowable Subject Matter

1. Claims 14, 18, 22-25 and 28-29 are allowed based on their highly detailed designs which are not found in the prior art of record. The process of detecting HDR area, determining if data is to be exchanged, invoking the DBO for data exchange, invoking an application database and authenticating at least one application in the database with the BTS is novel in the examiner's opinion.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
PRIMARY EXAMINER
2-23-05